

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1 - 16 (Canceled)

17. (currently amended) A light control apparatus comprising:

a splitting [[means]] device for splitting an input signal light to obtain a monitor light which is a part of the input light;

a photoelectric conversion [[means]] device for converting the obtained monitor light into an electric signal; and

an opening and closing degree control [[means]] device for changing the opening and closing degree of an optical transmission path for transmitting the input signal light by directly receiving the electric signal as a drive voltage.

18. (currently amended) The light control apparatus according to claim 17, wherein said photoelectric conversion [[means]] device is one or more semiconductor photovoltaic device.

19. (currently amended) The light control apparatus according to claim 17, wherein said photoelectric conversion [[means]] device is one or more semiconductor photovoltaic device having a nipi-type multijunction structure.

20. (currently amended) The light control apparatus according to claim 17, wherein said opening and closing degree control [[means]] device is an optical shutter using a micromachine.

21. (currently amended) The light control apparatus according to claim 17, wherein said opening and closing degree control [[means]] device is an optical device such as an absorption-type modulator or refractive index-type modulator.

22. (currently amended) The light control apparatus according to claim 17, wherein a voltage source is inserted between said photoelectric conversion [[means]] device and said opening and closing degree control [[means]] device.

23. (currently amended) The light control apparatus according to claim [[27]] 17, wherein at least two of said splitting [[means]] device, [[means]] device for converting the monitor light into an electrical signal, and [[means]] device for controlling the opening and closing degree of an optical

transmission path based on the electrical signal are disposed on a single planar optical circuit.

24. (currently amended) The light control apparatus according to claim 17, wherein said opening and closing degree control [[means]] device comprises [[means]] a device for holding an opened and closed state controlled based on the electrical signal and [[means]] a device for indicating the held opened and closed state.

25. (currently amended) A light control apparatus comprising:

a splitting and photoelectric conversion [[means]] device for splitting an input signal light to obtain a signal light which is a part of the input light and converting the signal light into an electric signal; and

an opening and closing degree control [[means]] device for changing the opening and closing degree of an optical transmission path for transmitting the input signal light by directly receiving the electric signal as a drive voltage.

26. (currently amended) The light control apparatus according to claim 25, wherein said splitting and photoelectric conversion [[means]] device is a semiconductor photovoltaic device having a stack-type structure.

27. (currently amended) The light control apparatus according to claim 25, wherein said splitting and photoelectric conversion [[means]] device is a stack-type semiconductor photovoltaic device having a nipi-type multijunction structure.

28. (currently amended) The light control apparatus according to claim 25, wherein said opening and closing degree control [[means]] device is an optical shutter using a micromachine.

29. (currently amended) The light control apparatus according to claim 25, wherein said opening and closing degree control [[means]] device is an optical device such as an absorption-type modulator or refractive index-type modulator.

30. (currently amended) The light control apparatus according to claim 25, wherein a voltage source is inserted between said splitting and photoelectric conversion [[means]] device and said opening and closing degree control [[means]] device.

31. (currently amended) The light control apparatus according to claim 25, wherein said splitting and photoelectric conversion [[means]] device and opening and closing degree

control [[means]] device are disposed on a single planar optical circuit.

32. (currently amended) The light control apparatus according to claim 25, wherein said opening and closing degree control [[means]] device comprises [[means]] a device for holding an opened and closed state controlled based on the electrical signal and [[means]] a device for indicating the held opened and closed state.

33. (currently amended) The light control apparatus according to claim 25, wherein said transmission and photoelectric conversion [[means]] device is a semiconductor photovoltaic device having a waveguide structure.

34. (currently amended) A light control apparatus comprising:

a transmission and photoelectric conversion [[means]] device for transmitting an input signal light and converting a part of the input signal light into an electric signal; and

a cutoff [[means]] device for cutting off an optical transmission path for transmitting the input signal light by receiving the electric signal as a drive voltage.